

Remarks

Claims 7-9 and 13-26 are pending. Claims 7 and 8 are amended, claims 13-26 are added, and claims 1-6 and 10-12 are canceled without prejudice or disclaimer.

In response to the Office Action, favorable reconsideration and allowance of the present application are respectfully requested. The Office Action objects to Figures 5A and 5B. The Office Action also rejects claims 1-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,140,828 to Iino et al. (Iino). For the reasons set forth in detail below, it is respectfully submitted that this application is now in condition for allowance.

As stated above the Office Action objects to Figures 5A and 5B, and requests that the figures be designated by the legend "Prior Art." As shown in the attached replacement sheet, Figures 5A and 5B are designated as "Prior Art." Thus, it is respectfully requested that the objection to the drawings be withdrawn.

As stated above the Office Action indicates that independent claim 7 is anticipated by Iino. The invention recited in claim 7 is directed to a probe apparatus. The claim recites a mounting member on which an object to be inspected is mounted, with the mounting member configured to adjust a temperature of the object. A probe card is arranged opposite the mounting member. In addition, a driving mechanism is configured to change a relative positional relationship between the mounting member and the probe card. Moreover, sensor means detect a displacement of the probe card at a center of the probe card, with the sensor means provided at a part of the apparatus to which the probe card is fixed.

It is respectfully submitted that the cited reference fails to disclose or suggest the features of independent claim 7, particularly the features in which sensor means are provided at a part of a probe apparatus to which a probe card is fixed or attached.

It is respectfully submitted that the features of the invention recited in claim 7 can provide numerous advantages. By way of specific non-limiting examples, because the sensor

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Amendments to the Drawings

The attached replacement sheet includes changes to Figures 5A and 5B. The attached replacement sheet, which includes Figures 5A and 5B, replaces the original sheet including Figures 5A and 5B.

Attached: Replacement Sheet (1)

means are provided at a part of a probe apparatus to which a probe card is fixed, the apparatus is particularly well suited for direct detection of the displacement of the probe card, such as by detection of a center point of the probe card where probe pins can be located, without moving the sensor means. By way of a further non-limiting example, as shown in Figure 4 of the present application, the sensor means can be provided on the head plate 11a.

Iino is directed to a prober and probe method. It is respectfully submitted that Iino does not teach or render obvious the claimed features of sensor means detecting a displacement of a probe card which are provided at a part of a probe apparatus to which the probe card is fixed. Specifically, as shown in Figure 2 of Iino, the upper laser measuring sensor 32B is arranged on an alignment bridge 28B. The alignment bridge 28B, however, is not part of the apparatus to which the probe card 27 is fixed. Rather, the alignment bridge 28B has the upper camera 28C and the upper laser measuring sensor 32B attached thereto, and reciprocally moves the camera 28C and the sensor 32B in the Y-direction (see Figures 1 and 2). Thus, Iino does not show that the sensor 32B can be provided at a part of the probe apparatus to which the probe card 27 is fixed.

Further, it is respectfully submitted that there is no suggestion that arranging the sensor 32B at a part of the probe apparatus to which the probe card 27 is fixed can provide the above discussed advantages of the invention recited in claim 7.

Thus, for the foregoing reasons, it is respectfully submitted that claim 7 is allowable over Iino. Therefore, allowance of independent claim 7 is respectfully requested.

Claims 8 and 9 are allowable for at least the same reasons as independent claim 7 from which they depend, as well as for their own features which are not taught or suggested by the cited references. Thus, allowance of dependent claims 8 and 9 is respectfully requested.

It is respectfully submitted that each of new independent claims 13, 20, and 24, as well as claims 14-19, 21-23, 25 and 26 depending therefrom, are allowable for reasons similar to those discussed above with respect to independent claim 7, as well as for their own features. In particular, the new independent claims respectively includes the features in which a sensor unit is provided at a part of a probe apparatus to which a probe card is fixed, detecting a displacement of a region of a probe card with respect to a position of a part of a probe apparatus to which the probe card is fixed, and means for detecting a displacement of a region of a probe card with respect to a position of a part of a probe apparatus to which the probe card is fixed.

Further, the new claims include additional features that are not suggested by the cited references. For example, with respect to claim 14, because a displacement is detected from a measuring point at a back surface of a probe card, an actual real-time vertical displacement of the probe card can be directly measured. Claim 15 recites a measuring point as corresponding to a center of probe pins. Claim 20 recites a probing method for use with a probe apparatus, which includes the step of detecting a displacement of a region of a probe card where probe pins are located, in which a detection of a displacement is made with respect to a position of a part of a probe apparatus to which a probe card is fixed. As discussed earlier, the cited reference does not disclose or suggest a probe apparatus or a probing method for detecting the displacement of the probe card with respect to the position of a part of the probe apparatus to which the probe card is fixed. Thus, the allowance of Claims 13-26 is respectfully requested.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for claims 7-9 and 13-26 is earnestly solicited.

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Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

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(OSMMN 06/04)

Respectfully submitted,

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